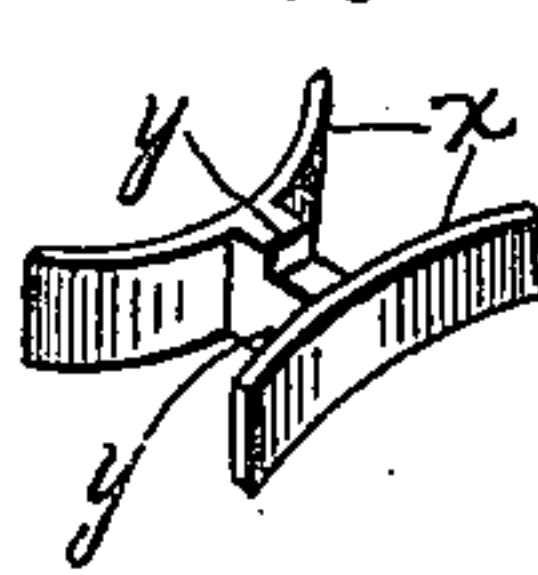
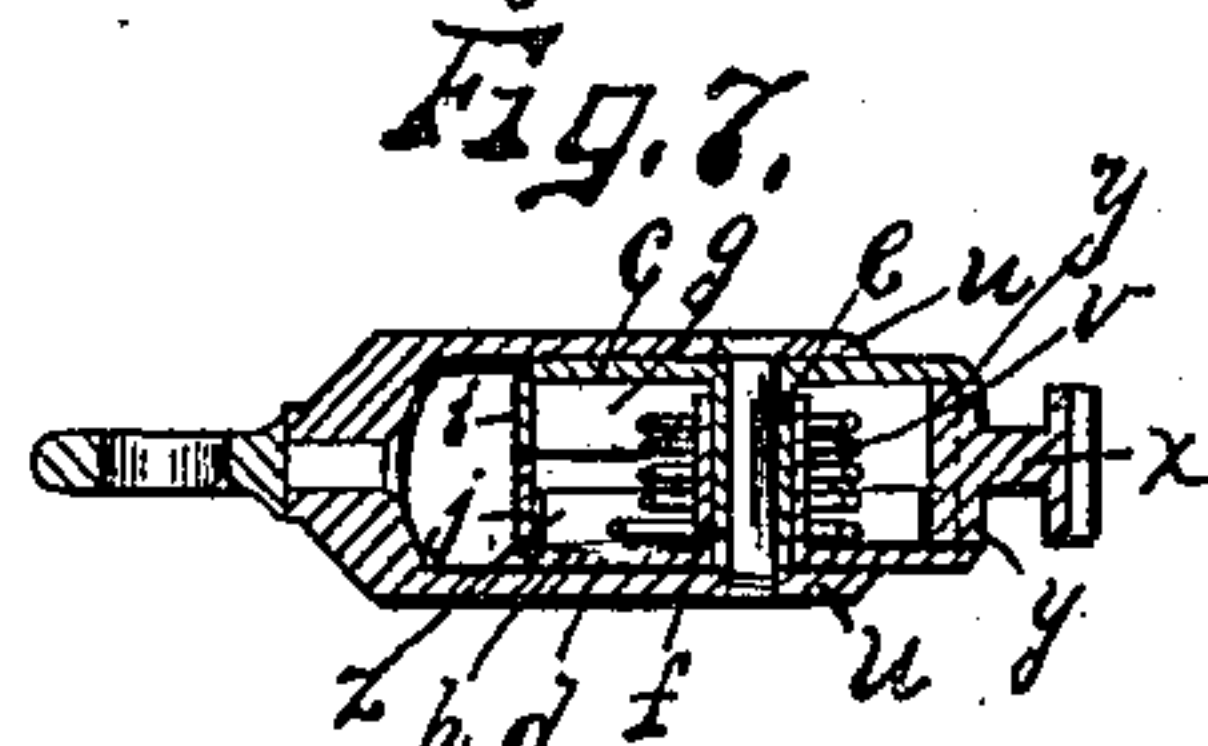
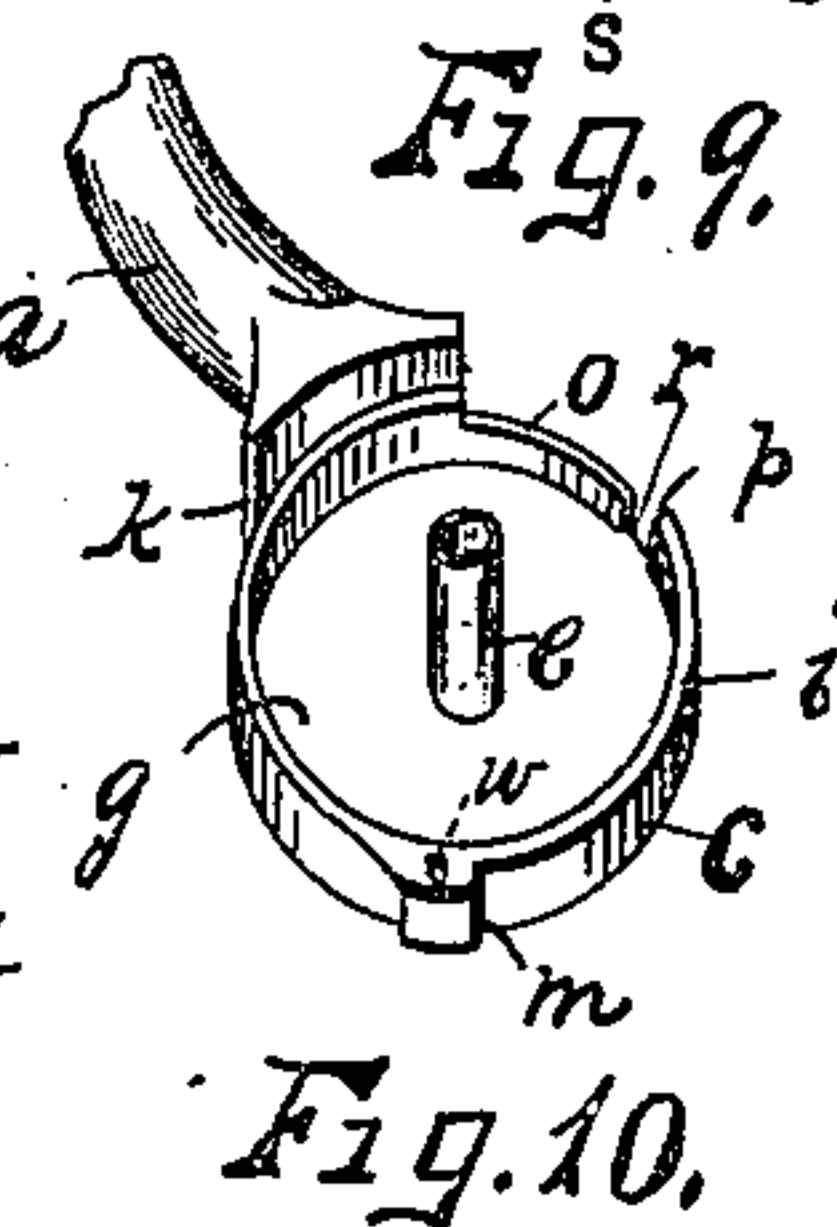
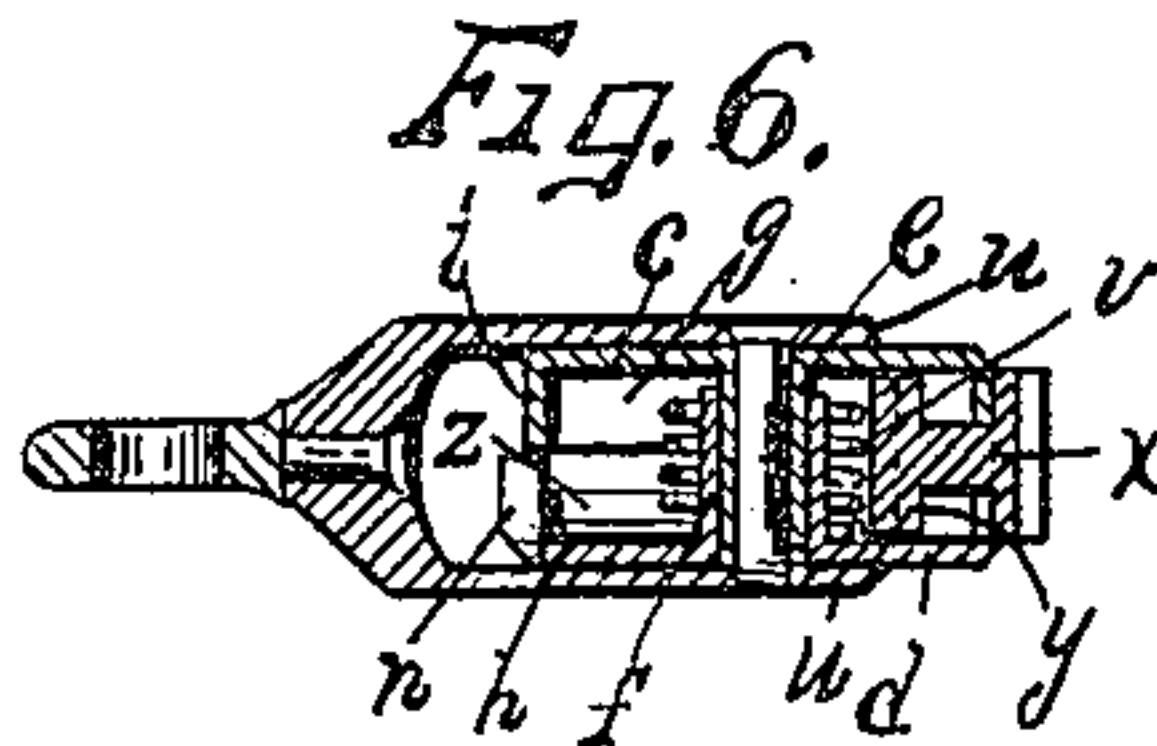
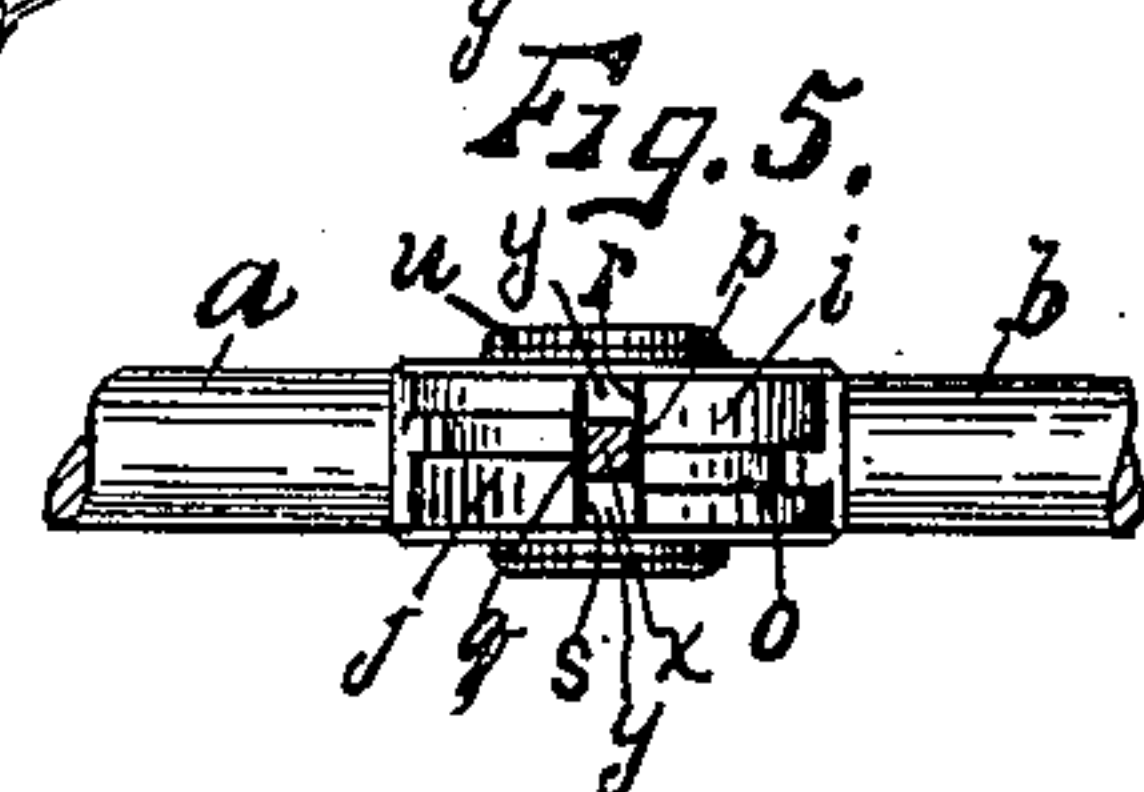
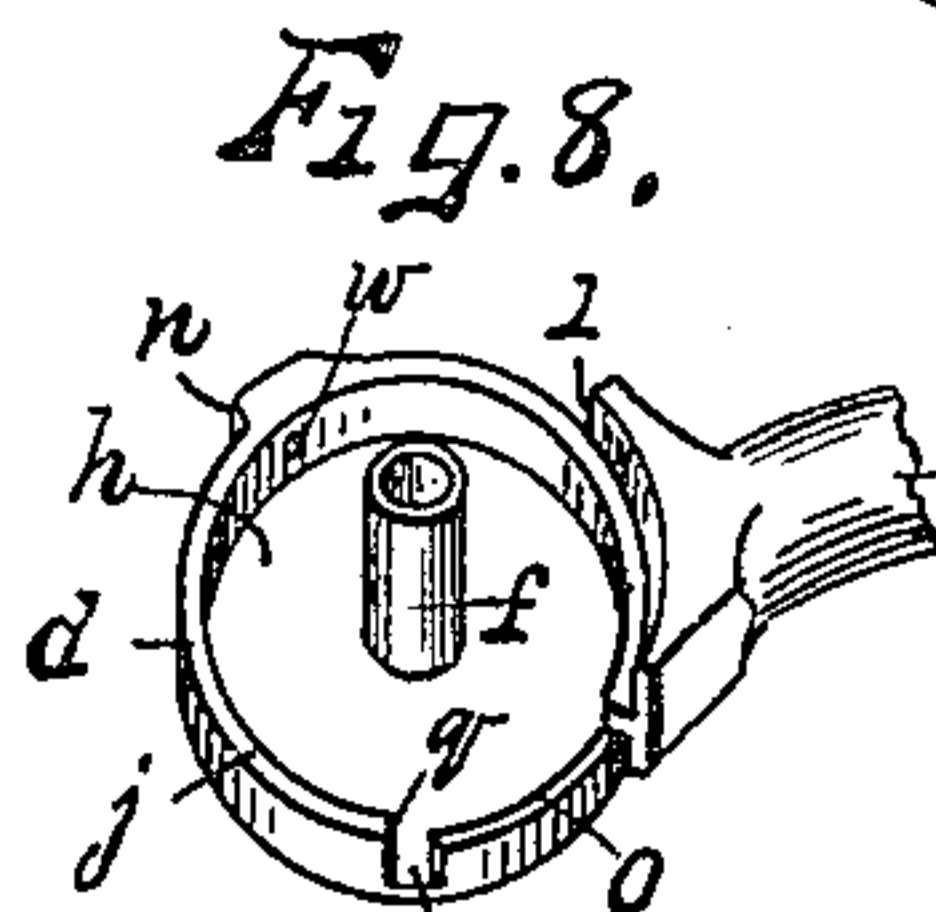
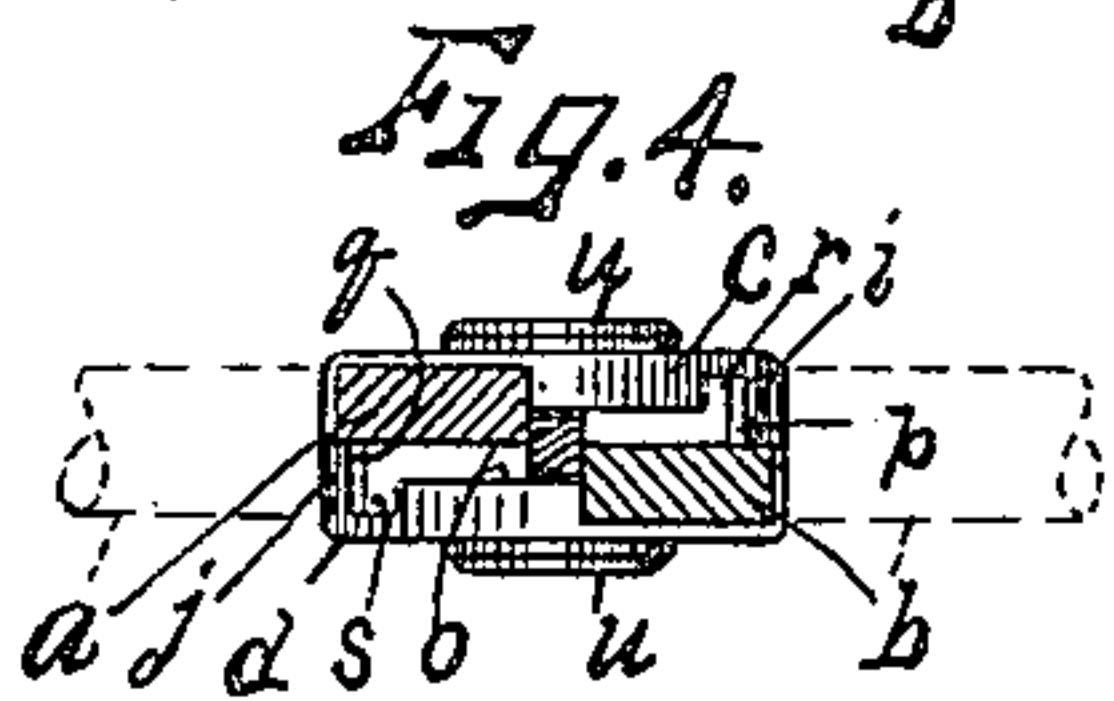
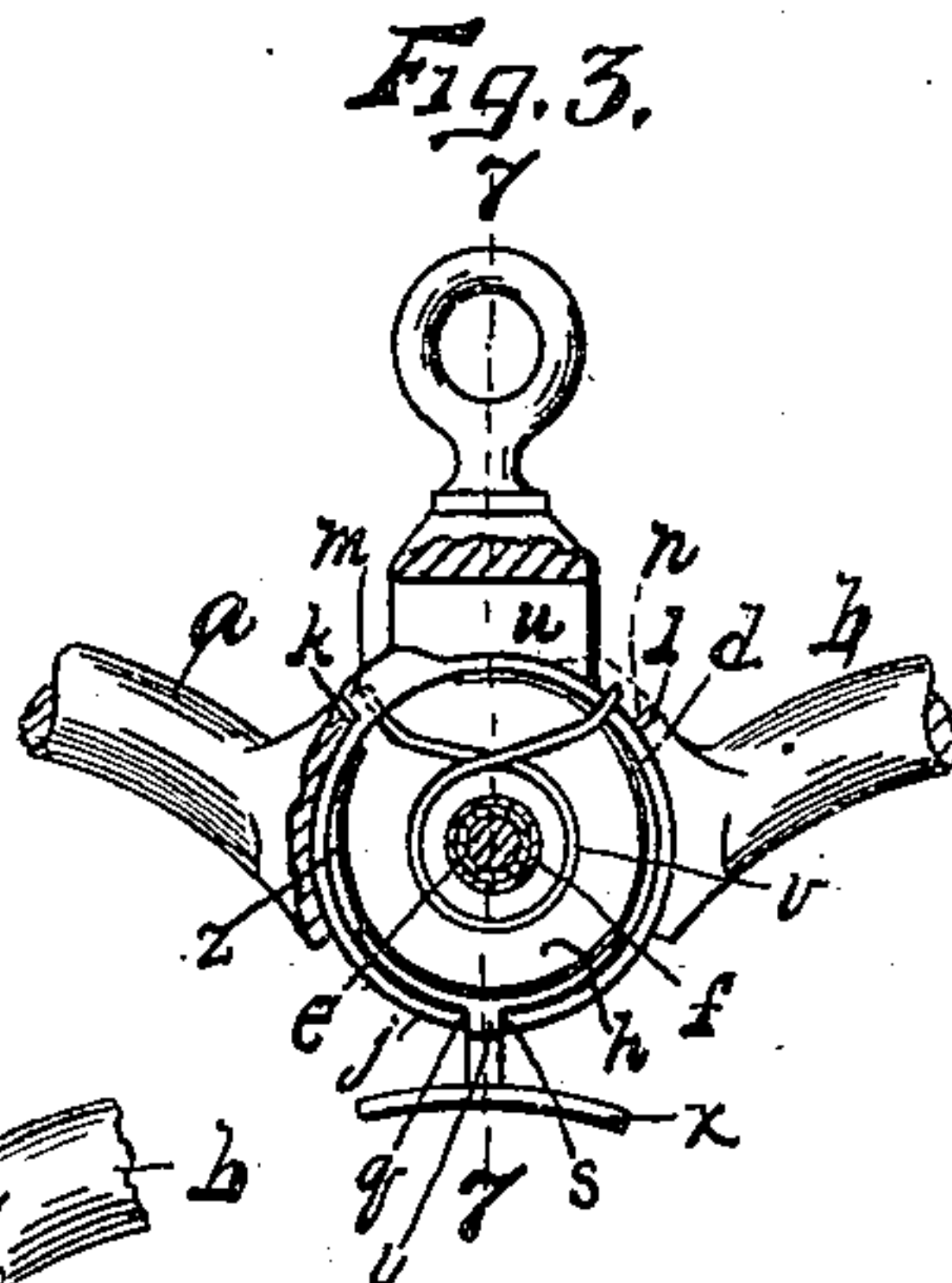
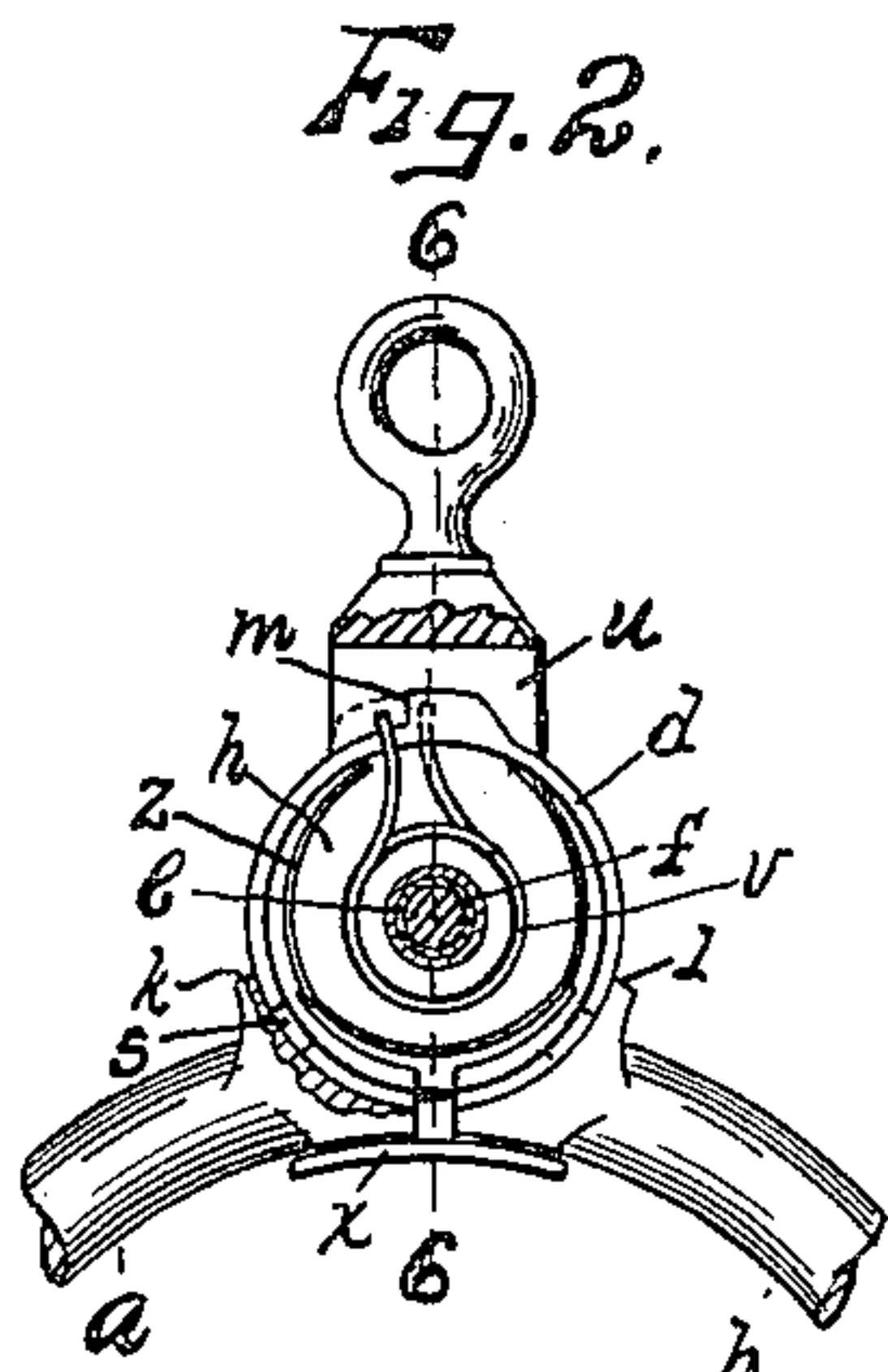
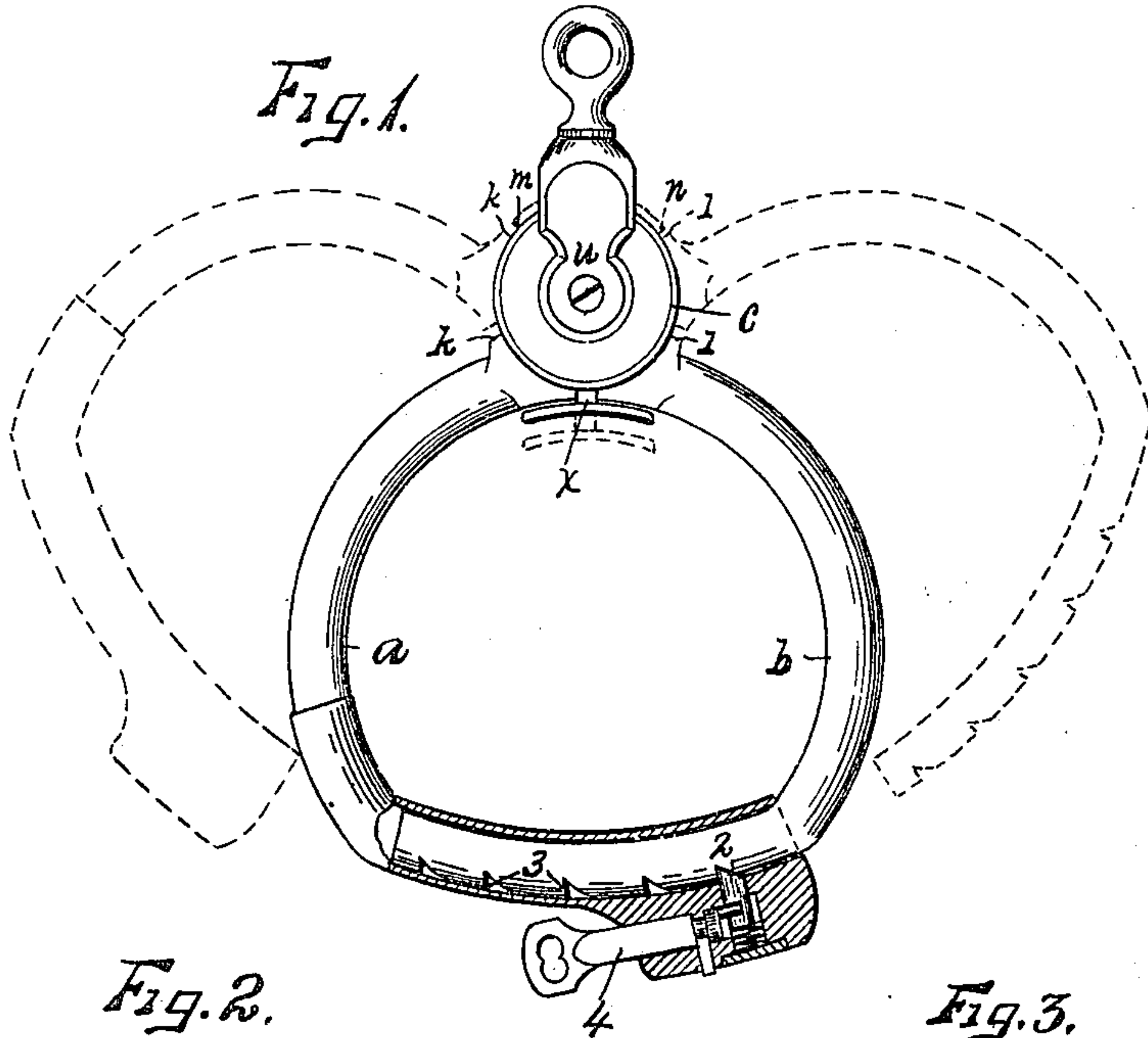


F. J. SCHIELE.
HANDCUFF.

(Application filed Apr. 30, 1900.)

(No Model.)



WITNESSES:
H. B. Bhave
H. E. Arthur

INVENTOR
Frederick J. Schiele
BY
Smith & Davis
ATTORNEYS.

UNITED STATES PATENT OFFICE.

FREDERICK J. SCHIELE, OF SYRACUSE, NEW YORK.

HANDCUFF..

SPECIFICATION forming part of Letters Patent No. 670,251, dated March 19, 1901.

Application filed April 30, 1900. Serial No. 14,806. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK J. SCHIELE, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Handcuffs, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in handcuffs, and has for its object the production of a simple and practical device of the character mentioned in which the movable jaws are automatically locked in their inoperative and operative positions and are automatically forced into operative position when said device is placed in position upon the wrist or other member of the body.

To this end the invention consists in the combination, construction, and arrangement of the component parts of a handcuff, as hereinafter fully described, and pointed out in the claims.

Figure 1 is a plan view, partly in section, of a handcuff embodying my invention. Figs. 2 and 3 are plan views, partly broken away, of the adjacent hinged ends of the parts seen in Fig. 1, the jaws being closed in Fig. 2 and open in Fig. 3. Figs. 4 and 5 are inner face views, respectively, of the parts seen in Figs. 2 and 3. Figs. 6 and 7 are sectional views taken, respectively, on lines 6 6 and 7 7, Figs. 2 and 3. Figs. 8 and 9 are isometric views of the adjacent portions of the jaws, and Fig. 10 is an isometric view of the locking member for holding the jaws in their inoperative positions.

Referring to the drawings, *a b* represent oppositely-arranged jaws having corresponding ends hinged together and their opposite ends movable toward and away from each other and provided with engaging shoulders detachably interlocking with each other. The hinged ends of the jaws *a b* preferably consist of enlarged cylindrical portions *c d*, arranged one above the other, and are provided with hollow substantially central hubs *e f*, telescoping with each other for forming a pivotal bearing upon which the sections *a b* move. The portions *c d* are usually provided with recesses *g h*, extending outwardly from their adjacent faces for forming annular

flanges *i j*, which are arranged substantially concentric with the hubs *e f*. The portions of the jaws *a b* adjacent to the cylindrical portions *c d* are preferably formed of greater thickness than the depth of the flanges *i j*, extend in opposite directions beyond the adjacent faces of the flanges, and are provided with shoulders *k l* for engaging similar shoulders *m n*, projecting from the peripheries of the cylindrical portions *c d* for limiting the outward movement of the free ends of the sections *a b*. The inner portions of the flanges *i j* of the cylindrical portions *c d* are formed of less height than the remaining portions of said flanges for forming a slot *o* and shoulders *p q*, which form the end walls of the slot *o*, and are movable toward and away from each other as the sections *c d* are closed and opened.

r s are cut-outs extending through the inner walls of the flanges *i j*, and preferably beyond the adjacent face of the portions of the flanges in which the slot *o* is formed, are movable into and out of registration with each other, and preferably form continuations or extensions of the slot *o* for receiving a locking member presently described.

The sections *a b* may be held in their assembled position by any desired fastening means, here shown as consisting of a yoke having separated ears *u u*, engaged with the opposite faces of the cylindrical portions *c d* and provided with apertures aligned with similar apertures extending through the outer walls and hubs *e f* of said portions *c d*, the aperture of one of the ears being threaded for receiving a screw which is passed through said apertures and hubs and serves to hold the adjacent parts together. The free ends of the sections *a b* are automatically forced to their operative or closed position by a suitable spring, as *v*, arranged between the portions *c d* of the sections *a b* within the recesses *g h* and having its intermediate portion encircling the hubs *e f* and its opposite ends engaged with suitable shoulders, as apertures *w w*, formed, respectively, in the flanges *i j* and communicating with the recesses *g h*.

The sections *a b* are held in their open or inoperative position by a suitable locking

member movable automatically into operative position, and preferably consists of a reciprocally-movable plunger x , having its intermediate portion arranged in the slot o and provided with the shoulders $y y$, movable into and out of the cut-outs $r s$ when said cut-outs are alined with each other or when the sections $a b$ are opened to their extremelimit, whereupon the shoulders $y y$ of the plunger are automatically forced into said cut-outs and lock the sections in their open or inoperative positions. The inner and outer ends of the plunger x are preferably formed of greater area or width than the slot o and the cut-outs $r s$, the inner enlarged end being arranged in the recesses $g h$ and adapted to engage the inner faces of the flanges $i j$ for limiting the outward movement of the plunger. The outer end of the plunger is formed of substantially the same contour as the adjacent portions of the sections $a b$, and when said sections are locked in their inoperative position the inner face of said enlarged outer end of the plunger is separated from the adjacent faces of said sections in order that when desired to apply the handcuff to the wrist or other member of the body it is only necessary to slightly press the outer face of the plunger against the wrist or other member, whereupon the shoulders $y y$ are forced inwardly out of engagement with the side walls of the cut-outs $r s$ and the free ends of the sections $a b$ are immediately and automatically closed upon the wrist or other member by the spring v .

The means for automatically forcing the plunger into operative position for locking the sections $a b$ in their open position preferably consists of a spring z , arranged in one of the recesses $g h$ and having its intermediate portion engaged with the inner face of the enlarged inner end of the plunger x and its opposite ends engaged with the flange or flanges $i j$ of the cylindrical portions $c d$. The free ends of the sections $a b$ may be locked in their closed position by any desired means, here shown as consisting of a spring-actuated catch 2, provided in one of the sections and adapted to engage either of a series of notches or shoulders 3, formed on the other of said sections, as seen in Fig. 1. The catch 2 may be forced out of operative position by any desired means, as a key 4, also seen in Fig. 1. The means for locking the free ends of the sections $a b$ in their closed positions forms no part of my present invention, and it is therefore unnecessary to further illustrate or describe the same.

The operation of my invention will now be readily understood upon reference to the foregoing description and the accompanying drawings, and it will be noted that considerable change may be made in the detail construction and arrangement of the parts herein shown and described without departing from the spirit thereof. Therefore I do not limit

myself to the precise construction and arrangement thus shown and described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A handcuff comprising movable jaws each pivoted to the other and provided with a concentric flange having a cut-out, and a plunger having its intermediate portion movable into said cut-outs when the jaws are opened for locking the jaws in their open position and its opposite ends provided with enlarged heads for the purpose described.

2. The combination of the jaws of a handcuff having adjacent cylindrical ends lapped one upon the other and each provided with a hollow substantially central hub projecting from its inner face and telescoping with each other for forming a pivotal bearing for the jaws, said cylindrical portions having their peripheral walls provided with cut-outs movable into and out of registration with each other, and a plunger movable in said cut-outs and having its inner end movable between the cylindrical portions of the jaws and provided with a head formed of greater width than said cut-outs.

3. A handcuff comprising movable jaws each pivoted to the other and provided with a concentric flange having a cut-out, said cut-outs being movable into and out of registration with each other, a plunger movable into said cut-outs, and provided with an enlarged inner end adapted to engage the inner face of the flange, and means arranged within the flange for forcing said plunger outwardly.

4. A handcuff comprising movable jaws having cylindrical adjacent ends provided with annular flanges and substantially central inwardly-projecting hubs telescoping with each other, said flanges being formed with cut-outs movable into and out of registration with each other, a plunger movable in said cut-outs and having its inner end provided with a head adapted to engage the inner faces of said flanges and its outer end provided with an enlargement, and a spring arranged within the flange for forcing said plunger outwardly.

5. A handcuff comprising movable jaws having cylindrical adjacent ends pivoted to each other, and provided with inwardly-projecting annular flanges, means interposed between the cylindrical ends of the jaws for automatically locking said jaws in their open position, and a coil-spring having one end engaged with the flange of one of the jaws and its other end engaged with the flange of the other jaw for forcing said jaws toward each other.

6. A handcuff comprising movable jaws pivotally connected to each other and provided with substantially central hubs telescoping with each other for forming said pivotal connections and with annular flanges encircling said hub, said flanges being provided

with cut-outs extending therethrough, a
spring for forcing the jaws to their closed
position, a plunger interposed between the
pivotal ends of said jaws and movable into
5 the cut-outs for locking the jaws, in their open
position, and a spring for automatically forc-
ing the plunger into operative position.

In witness whereof I have hereunto set my
hand this 23d day of April, 1900.

FREDERICK J. SCHIELE.

Witnesses:

C. E. RAFFERTY,

H. P. DENISON.